

I claim:

1. An mobile communications device for use with character-based languages, comprising:
 - a character-based VLIW (very long instruction word) processor which
- 5 comprises a VLIW processor core and a character algorithm operable for determining a set of character-based language (CBL) characters.
2. The device of claim 1, further comprising code morphing software operable for translating x86 instructions to VLIW instructions, wherein the character algorithm is a native VLIW algorithm.
- 10 3. The device of claim 2, wherein the processor is part of a system on a chip which further comprises a DSP (digital signal processor) core operable for speech and channel coding, speech recognition and data compression.
4. The device of claim 3, the system on a chip further comprising display, memory and peripheral controllers.
- 15 5. The device of claim 2, wherein the processor is part of an integrated circuit which further comprises a DSP (digital signal processor) core operable for speech and channel coding, speech recognition and data compression.
6. The device of claim 2, further comprising instructions operable with the processor for providing a CBL graphical user interface.
- 20 7. The device of claim 2, wherein the instructions part of a Chinese language operating system, and the CBL is Chinese language.
8. A system including the device according to claim 5, further comprising a network router with a compression engine, wherein the device and the router are operable to communicate compressed CBL data to each other.
- 25 9. The system of claim 8, wherein the router is part of a network of the group of a wireless local area network (LAN), cellular voice, cellular data, and fixed network.
10. A character-based processor for use with character-based languages, comprising:

a VLIW (very long instruction word) processor core; and
a character algorithm operable for determining a set of character-based
language (CBL) characters.

11. The processor of claim 10, further comprising code morphing software
5 operable for translating x86 instructions to VLIW instructions.
12. The processor of claim 10, wherein the character algorithm is a native VLIW
algorithm.
13. A system on a chip including the processor of claim 10, wherein the system
on a chip further comprises a DSP (digital signal processor) core operable for
10 speech and channel coding, speech recognition and data compression.
14. The system of claim 13 further comprising display, memory and peripheral
controllers.
15. The processor of claim 10, wherein the processor is part of an integrated
circuit which further comprises a DSP (digital signal processor) core operable for
15 speech and channel coding, speech recognition and data compression.
16. The processor of claim 15, further comprising instructions operable with the
processor for providing a CBL graphical user interface.
17. The processor of claim 16, wherein the instructions part of a Chinese
language operating system, and the CBL is Chinese language.
- 20 18. A system including plural wireless communication devices, each device
comprising a processor according to claim 17, the system further comprising a
network router with a compression engine, wherein the device and the router are
operable to communicate compressed CBL data to each other.
19. The system of claim 18, wherein the router is part of a network of the group
25 of a wireless local area network (LAN), cellular voice, cellular data, and fixed
network.
20. A method for processing data for communicating a character based language
(CBL),
comprising:

processing CBL characters in a character-based VLIW (very long instruction word) processor which comprises a VLIW processor core and a native VLIW character algorithm operable for determining a set of character-based language (CBL) characters.